

WHAT IS CLAIMED IS:

1. A transmission power control method performing a broad-band spread transmission by using a receiver,
5 and comprising the steps of:

detecting a reception error rate of a received signal;

comparing the detected reception error rate and a predetermined target reception error rate;

10 correcting the ratio between the target received signal power value and the interference power value, or a target reception power value based on the result of the comparison; and

15 settling a transmission control signal so that the transmission power can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target reception power value.

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2. The transmission power control method of claim 1, wherein said correcting process comprising:

25 varying the amount of correction of the ratio between the target received signal power value and the interference power value, or the amount of correction of the target reception power value, according to the difference between the detected reception error rate

and the target reception error rate.

3. The transmission power control method of claim 1 or 2, further comprising:

5 when performing a site diversity reception for synthesizing the received signal at a higher hierarchy station after receiving transmitted signals at a plurality of stations,

10 generating a synthesized signal by synthesizing the received signal by a site diversity;

 detecting a reception error rate of the synthesized signal;

 comparing the detected synthesized reception error rate and the predetermined set target synthesized reception error rate;

15 correcting the target reception error rate at each station based on the result of the comparison; and

20 setting the transmission control signal so that the transmission power can be controlled to a predetermined target value based on the corrected target reception error rate at each station.

4. The transmission power control method of claim 3, wherein, said correcting process comprising:

25 varying the correction amount of the target reception error rate at each station, according to the

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difference between the detected synthesized reception error rate and the target synthesized reception error rate.

5 5. A mobile communication system controlling transmission power of a transmitting signal between a base station and a mobile station by a wide-band spread transmission,

and the system comprising:

10 a detection means for detecting a reception error rate of a received signal from the mobile station;

a comparision means for comparing the detected reception error rate and a predetermined target reception error rate;

15 a correction means for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

a control means for setting a transmission

20 control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target

25 reception power value;

a transmission means for transmitting the set control signal to the base station; and

a transmission power control means for analyzing the received control signal from the base station, and controlling the transmission power based on the result of the analysis.

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6. The mobile communication system of claim 5, wherein the correction means comprising:

varying the amount of correction of the ratio between the target received signal power and the interference power value, or the amount of correction of the target reception power value, according to the difference between the detected reception error rate and the target reception error rate.

15 7. The mobile communication system of claim 5 or 6, further comprising:

when performing a sit diversity reception for synthesizing the received signal at a higher hierarchy station after receiving transmitted signals at a plurality of stations,

a generation means for generating a synthesized signal by synthesizing the received signal by the site diversity;

a detection means for detecting a reception error rate of the synthesized signal;

a comparison means for comparing the detected synthesized reception error rate and the predetermined

set target synthesized reception error rate;
a correction means for correcting the target
reception error rate at each station based on the
result of the comparison; and
5 a control means for setting the transmission
control signal so that the transmission power can be
controlled to a predetermined target value based on
the corrected target reception error rate at each
station.

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8. The mobile communication system of claim 7,
wherein, said correction means comprising:

varying the correction amount of the target
reception error rate at each station, according to the
15 difference between the detected synthesized reception
error rate signal and the target synthesized reception
error rate signal.

9. A base station controlling transmission power of
20 a transmitting signal from a mobile station by a
wide-band spread transmission,

and the base station comprising:
a detection means for detecting a reception error
rate of a received signal;
25 a comparison means for comparing the detected
reception error rate and a predetermined target
reception error rate;

a correction means for correcting the ratio between the target received signal power value and the interference power value, or the target reception power based on the result of the comparison;

5 a control means for setting a transmission control signal so that the transmission power of the mobile station can be controlled to a predetermined target value, based on the corrected ratio between the target received signal power value and the interference power value, or based on the target 10 reception power value; and

 a transmission means for transmitting the set control signal to the base station.

15 10. A mobile station controlling transmission power of a transmitting signal from a base station by a wide-band transmission, and the mobile station comprising:

20 a control signal outputted from the base station of claim 9;

 an extract means for analyzing the outputted control signal transmitted from the base station and extracting a transmission power control information included in the control signal; and

25 a transmission power control means for controlling the transmission power so that the transmission power can be controlled to a

predetermined target value based on the extracted transmission power control information.